

S/N 10/564,727

relatively large amount of the molecular weight regulator will need to be employed. Generally, greater amounts of the molecular weight regulator are required when the catalyst system being utilized contains hydrogen fluoride or is an aged catalyst which contains boron trifluoride. However, as a general rule, from about 0.25 phm (parts by weight per hundred parts of monomer) to about 1.5 phm of the molecular weight regulator will be employed. The molecular weight regulators that can be used include  $\alpha$ -olefins, such as ethylene, propylene, and 1-butene, cis-2-butene, trans-2-butene, isobutene, and para-styrenated diphenylamine.

SUMM [0055] It is normally preferred to utilize 0.5 phm to 0.75 phm of para-styrenated diphenylamine as the molecular weight ragulator because, at such concentrations, good reductions in molecular weight can be realized and the high cis-1,4-polybutadiene rubber produced is provided with a good level of stabilization. In such cases, the molecular weight of the rubber being synthesized can be controlled by adjusting the ratio of the fluorine containing compound to the organoaluminum compound. In other words, at constant levels of the para-styrenated diphenylamine within the range of 0.25 phm to 1.5 phm, the molecular weight of the polymer being synthesized can be controlled by varying the ratio of the fluorine containing compound to the organoaluminum compound. Maximum reductions in molecular weight and maximum conversions normally occur at molar ratios of the fluorine containing compound to the organoaluminum compound which are within the range of 1.5:1 to 2:1. At molar ratios of less than 1.5:1 and at molar ratios within the range of 2:1 to 2.75:1, lesser reductions in molecular weight occur.

=> FIL STNGUIDE  
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
298.11	298.32

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-4.68	-4.68

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SET PLURALS ON PERM  
SET ABBR ON PERM

FILE 'USPATFULL, USPATOLD, USPAT2, CAPLUS, JAPIO' ENTERED AT 16:41:12 ON 18 DEC 2007

L1	139	SEA ABB=ON	PLU=ON	((BUTADIEN?(1A)(POLYMER# OR RUBBER# OR ELASTOMER#)) OR POLYBUTADIEN?(S)(FOURIER(2A)(INFRARED OR INFRA-RED OR IR))
L2	1000	SEA ABB=ON	PLU=ON	((BUTADIEN?(1A)(POLYMER# OR RUBBER# OR ELASTOMER#)) OR POLYBUTADIEN?(10A)((CIS# OR 1,4-CIS?)(4A)(99## # OR 100))

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L3 753 SEA ABB=ON PLU=ON ((BUTADIEN?(1A)(POLYMER# OR RUBBER# OR ELASTOMER#)) OR POLYBUTADIEN?(8A)((CIS# OR 1,4-CIS?)(3A)(99### OR 100))

L4 1 SEA ABB=ON PLU=ON L1 AND L3  
D L4 1 IBIB ABS

L5 214 SEA ABB=ON PLU=ON ((BUTADIEN?(1A)(POLYMER# OR RUBBER# OR ELASTOMER#)) OR POLYBUTADIEN?(8W)((CIS# OR 1,4-CIS?)(3A)(99### OR 100))

L6 0 SEA ABB=ON PLU=ON L5 AND L1

L7 31787 SEA ABB=ON PLU=ON L5 AND FOURIER TRANSFORM OR FT-IR

L8 156 SEA ABB=ON PLU=ON (POLYBUTADIENE OR POLY(1W) BUTADIENE) (S) (FOURIER TRANSFORM OR FT-IR)

L9 0 SEA ABB=ON PLU=ON L5 AND L8

L10 3219 SEA ABB=ON PLU=ON (POLYBUTADIENE OR POLY(1W) BUTADIENE) (S) (HIGH(2W) (CIS? OR 1,4-CIS?))

L11 9 SEA ABB=ON PLU=ON L8 AND L10  
D L11 1-9 IBIB ABS  
D L11 6 IBIB HIT  
D L11 4 IBIB HIT  
D L11 3 IBIB HIT

L12 29 SEA ABB=ON PLU=ON (POLYBUTADIENE OR POLY(1W) BUTADIENE) (S) (GADOLINIUM? OR GADOLOCENE?)

L13 14 SEA ABB=ON PLU=ON L10 AND L12  
D L13 1-14 IBIB ABS  
D L13 11 IBIB HIT  
D L13 10 IBIB HIT  
D L13 7 IBIB HIT

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FILE HOME

FILE USPATFULL

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 18 Dec 2007 (20071218/PD)

FILE LAST UPDATED: 18 Dec 2007 (20071218/ED)

HIGHEST GRANTED PATENT NUMBER: US7310823

HIGHEST APPLICATION PUBLICATION NUMBER: US2007289043

CA INDEXING IS CURRENT THROUGH 18 Dec 2007 (20071218/UPCA)

ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 18 Dec 2007 (20071218/PD)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2007

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2007

FILE USPATOLD

FILE COVERS U.S. PATENTS 1790-1975

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FILE USPAT2

FILE COVERS 2001 TO PUBLICATION DATE: 18 Dec 2007 (20071218/PD)

FILE LAST UPDATED: 18 Dec 2007 (20071218/ED)

HIGHEST GRANTED PATENT NUMBER: US2007274931

HIGHEST APPLICATION PUBLICATION NUMBER: US2007289036

CA INDEXING IS CURRENT THROUGH 18 Dec 2007 (20071218/UPCA)

S/N 10/564,727

ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 18 Dec 2007 (20071218/PD)  
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2007  
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FILE COVERS 1907 - 18 Dec 2007 VOL 147 ISS 26  
FILE LAST UPDATED: 17 Dec 2007 (20071217/ED)

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FILE LAST UPDATED: 29 OCT 2007 <20071029/UP>  
FILE COVERS APRIL 1973 TO JULY 26, 2007

>>> GRAPHIC IMAGES AVAILABLE <<<

#### FILE STNGUIDE

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	3.48	301.80
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-4.68

STN INTERNATIONAL LOGOFF AT 17:58:31 ON 18 DEC 2007

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<input type="checkbox"/>	L10	(152/525 )![CCLS]	384
<input type="checkbox"/>	L9	(152/209.1 )![CCLS]	471
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<input type="checkbox"/>	L1	(526/340.4)![CCLS]	316

END OF SEARCH HISTORY